

of a plurality of pick heads. In addition, components 2 can also be fed to the pick stations using parallel feed sources, which also may be either continuous or discontinuous.--

In the claims

Please cancel claims 70 and 71.

Please amend claims 30, 31, 32, 44, 48, 53, 54, 61, 62, 64, 72, 74 and 75 as follows:

b1 30. (Twice Amended) A component transfer apparatus for transferring a component having leads, said apparatus comprising:

b2 a pick and place machine including a controller connected to a movable pick head and a component feed source, said pick head having access to said component feed source; and

a fiducial alignment detector comprising a receiver directed toward said feed source and connected to said controller, wherein said controller contains instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment that is indicative of a predetermined lead alignment.

31. (Amended) The apparatus of claim 30, wherein said component feed source comprises a component feed source having a continuous serial track.

32. (Amended) The apparatus of claim 31, wherein said component feed source further comprises a plurality of component trays serially disposed along said continuous serial track.

b3 44. (Amended) A component transfer apparatus for a component having leads, said apparatus comprising:

a pick and place machine having a component feed source and a movable pick head having access to said component feed source;

a fiducial alignment detector directed toward said component feed source; and

a controller coupled to said fiducial alignment detector and containing instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment that is indicative of a predetermined lead alignment.

B4
48. (Amended) The component transfer apparatus of claim 44, wherein said controller contains instructions which, when executed, cause said controller to affect a control scheme in response to said fiducial alignment comparison.

D5
53. (Amended) A component transfer apparatus for a component having leads and a fiducial marker thereon that is indicative of an alignment of the leads, said apparatus comprising:
a pick and place machine having a component feed source and a movable pick head having access to said component feed source;
a fiducial alignment detector directed toward said component feed source; and
a controller coupled to said detector and containing instructions which, when executed by said controller, cause said controller to compare a detected alignment of the fiducial marker with a predetermined fiducial alignment which corresponds to a predetermined lead alignment.

54. (Amended) The component transfer apparatus of claim 44, wherein the component includes at least two fiducial markers each having an alignment that is indicative of the predetermined lead alignment.

Sub C3
61. (Amended) A component transfer apparatus for a component having leads, said apparatus comprising:
a pick and place machine having a component feed source and a movable pick head having access to said component feed source;
a fiducial alignment detector directed toward said component feed source and having an alignment signal output; and
a controller coupled to said detector alignment signal output and containing instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment that is indicative of a predetermined lead alignment.

62. (Amended) The component transfer apparatus of claim 61, wherein said alignment signal output is a warning prompt.

and C 64. (Amended) A component transfer apparatus for a component having leads, said apparatus comprising:

bx a pick and place machine having a component feed source and a movable pick head having access to said component feed source; a fiducial alignment detector directed toward said component feed source; and a controller coupled to said detector and containing instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment that is indicative of a predetermined lead alignment, and cause said movable pick head to pick a component from said component feed source.

and C 72. (Amended) A component transfer apparatus for a component having leads, said apparatus comprising:

bx a pick and place machine having a component feed source and a moveable pick head, wherein said component feed source includes at least one nest that defines an asymmetric recess and said moveable pick head has access to said component feed source;

a fiducial alignment detector directed toward said feed source;

a controller containing instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment that is indicative of a predetermined lead alignment and cause said controller to advance said component feed source.

and Cb 74. (Amended) A component transfer apparatus for a component having leads, said apparatus comprising:

component conveying means;

means for detecting a fiducial alignment adjacent said component conveying means;

and *b* means for comparing the detected fiducial alignment with a predetermined fiducial alignment that is indicative of a predetermined lead alignment.

75. (Amended) The apparatus of claim 74, further comprising signal means indicative of whether the detected fiducial alignment corresponds to the predetermined fiducial alignment.